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Zinc Supplementation and COVID-19

Recommendations

There are insufficient data to recommend either for or against the use of zinc for the treatment of COVID-19.

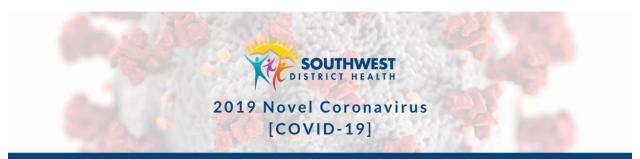
SWDH, in alignment with the National Institutes of Health ("NIH") COVID-19 Treatment Guidelines Panel, recommends against using zinc supplementation above the recommended dietary allowance for the prevention of COVID-19, except in a clinical trial.

Rationale

Research has shown increased zinc concentrations in the body can impair the reproduction (replication) of a number of RNA viruses. Zinc may also be effective at combating COVID-19 (also an RNA virus), but an optimal dose of zinc for the treatment of COVID-19 is not established. The recommended dietary allowance for elemental zinc is 11 mg daily for men and 8 mg for nonpregnant women. The doses used in registered clinical trials for COVID-19 vary between studies, with a maximum dose of zinc sulfate 220 mg (50 mg of elemental zinc) twice daily.

Long-term zinc supplementation can cause serious side effects, notably copper deficiency with reversible anemia and low white blood cells.³ Zinc supplementation for a duration as short as 10 months has been associated with copper deficiency.⁴ Zinc supplementation can also potentially cause irreversible neurologic manifestations (i.e. muscle pain, balance problems, weakness, etc.).^{5,6} In addition, oral zinc can decrease the levels of several medications that bind with the zinc cation.²

Because zinc has not been shown to have a clinical benefit and may be harmful, presently zinc supplementation above the recommended dietary allowance is not recommended for the prevention of COVID-19, except in a clinical trial.



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References

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